

Application No. 10/587,802
AMENDMENT dated June 1, 2009
Response to Office Action of March 17, 2009

REMARKS/ARGUMENT

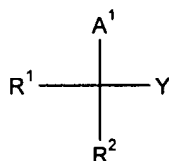
Claims 9 through 21 are pending in the application. Claims 9 through 20 are amended. Claim 20 is withdrawn from consideration, claims 1 through 8 are canceled, and new claim 21 is added.

Initially, the Examiner's attention is directed to co-pending U.S. Patent Application Serial No. 10/588,534, which claims similar, but patentably distinct, subject matter.

Claims 1, 2, and 4 through 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over WO 2001/11965 (Cooke et al.) in view of WO 2002/069712 (Holah et al.) and further in view of Colby, 15 WEEDS 202-22 (1967).

For convenience, in responding to this Office Action, the Applicants refer to the U.S. equivalents of the two PCT publications: U.S. Patent No. 6,821,992 to Cooke et al. and U.S. Publication No. 2007/0293549 to Holah et al.

Cooke et al. disclose compounds of general formula I,



where A¹, R¹, R² and Y are as defined in the description, and to their use as phytopathogenic fungicides.

It has been pointed out in the second paragraph of the present specification that international patent application WO 01/11965 generically discloses numerous

Application No. 10/587,802
AMENDMENT dated June 1, 2009
Response to Office Action of March 17, 2009

pyridylethylbenzamide derivatives and that the possibility of combining one or more of these numerous pyridylethylbenzamide derivatives with known fungicidal products to develop a fungicidal activity is disclosed in general terms, without any specific example or biological data.

It is submitted that there is no teaching or suggestion in Cooke et al. of the synergistic effect obtained when these pyridylethylbenzamide derivatives are combined with compounds capable of inhibiting the transport of electrons of the respiratory chain in phytopathogenic fungal organisms.

In the Office Action, the Examiner has made repeated statements that seem to imply that N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide is specifically disclosed in Cooke et al. The disclosure of the reference has been carefully reviewed and such a specific teaching has not been found. The Applicants do not deny that the broad disclosure of Cooke et al. reads on N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide but do not believe this compound, per se, is mentioned. If the Applicants are in error on this point, the Examiner is respectfully requested to show where in the reference this compound, per se, is disclosed.

The Examiner has acknowledged that Cooke et al. do not specifically teach:

that the weight ratio of compound (a) to compound (b) in the composition is from 0.01 to 20;

that the additional anti-fungal agents to be used inhibit electron transport;

that compound (b) of the composition is capable of inhibiting reduced nicotinamide-adenine dinucleotide dehydrogenase in phytopathogenic fungi;

Application No. 10/587,802
AMENDMENT dated June 1, 2009
Response to Office Action of March 17, 2009

that compound (b) of the composition, which is capable of inhibiting reduced nicotinamide-adenine dinucleotide dehydrogenase in fungal organisms, is diflumetorim;

that compound (b) is a compound capable of inhibiting succinate dehydrogenase in phytopathogenic fungi;

that compound (b) is any one of the listed compounds in claim 13;

that compound (b) is a compound capable of inhibiting mitochondrial ubiquinol:ferricytochrome-c oxidoreductase in phytopathogenic fungi;

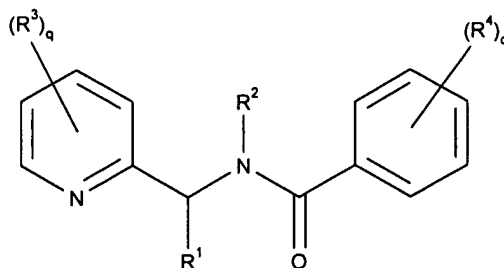
that compound (b) is any one of the listed compounds of claim 15;

that compound (b) is one of the listed strobilurin derivative compounds listed in claim 16; and

that an additional compound (c) is one of the compounds listed in claim 18.

The secondary references, Holah et al. and Colby, fail to supplement these deficiencies, as a reference, of Cooke et al.

Holah et al. disclose that a compound of the formula:



Application No. 10/587,802
AMENDMENT dated June 1, 2009
Response to Office Action of March 17, 2009

where R¹ can be hydrogen. Thus, in one embodiment, the Holah compound can have a -CH₂- group between the pyridine ring and the benzamide moiety. However, the compounds employed in the practice of the present invention have a -CH₂-CH₂- moiety between the pyridine ring and the benzamide moiety. Accordingly, Holah et al. do not teach the use of the compounds employed in the practice of the present invention. Further, to the best of the current Applicants' understanding, the Holah et al. compounds do not fall within the scope of the teaching of Cooke et al., either, since it does not appear that Cooke et al. disclose compounds having a -CH₂- (methylene) group between the pyridine ring and the benzamide moiety. Thus, it is submitted that the Holah et al. disclosure is not properly combinable with Cooke et al. to render the present invention obvious to those of ordinary skill in the art.

Further, it has been acknowledged by the Examiner in the Office Action that neither Holah et al. nor Cooke et al. teach that the pyridinylbenzamide compound can be combined with an additional compound (b) in a weight ratio from 0.01 to 20.

The Examiner has argued that:

Colby teaches a method for calculating the synergistic effect achieved when different herbicidal agents are combined in a composition (p. 20, formula IV). From this calculation, the optimal ratio of different herbicides could be determined. This calculation would also be useful towards antifungal agents. It is known in the art that compositions of antifungal agents possessing compounds with different modes of action are beneficial, to prevent resistance to fungicidal agents. The '965 publication teaches that the elected compound, N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide, may be combined with other fungicidal compounds, but does not specifically teach which agents. The '712 publication teaches that pyridinylbenzamide compounds can be combined with antifungal agents with [*sic*] that inhibit electron transport (p. 10, lines 3-29, and p. 11, lines 1-14), along with compounds with other modes of action. From the Colby reference, the optimal ratio of the elected compound, N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-

Application No. 10/587,802
AMENDMENT dated June 1, 2009
Response to Office Action of March 17, 2009

trifluoromethylbenzamide and the additional components can be determined, so that the composition may have the most beneficial fungicidal action. It is obvious that one could apply the teachings of the '965 publication, the '712 publication, and Colby to obtain an optimal ratio for different antifungal agents in the composition, and to arrive at the weight ratio range as stated in instant claim 1, to provide a composition with improved fungicidal action.

It is respectfully submitted that the Examiner's argument is untenable.

One factor that is very commonly used to show that a chemical invention involving the combination of two or more compounds is unobvious is to show that the whole is greater than the sum of its parts, i.e., that the two interact synergistically to yield a result that is greater than that which could be achieved by either compound used alone. The present case is such an example and uses the Colby method to determine whether or not synergism is present. The Colby method is simply a means for showing mathematically that an invention is unobvious because of synergism, after the invention has been made. The method is not used in the conception or reduction to practice of the invention itself. If the Examiner's position were to prevail, it is submitted that it would greatly hinder the progress of science and the useful art of chemistry.

Accordingly, it is requested that the rejection of claims 1, 2 and 4 through 19 under 35 U.S.C. § 103(a) as being unpatentable over Cooke et al. in view of Holah et al. and further in view of Colby be withdrawn.

Claims 1, 2, 4 through 9, and 17 through 19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 4

Application No. 10/587,802
AMENDMENT dated June 1, 2009
Response to Office Action of March 17, 2009

through 9, 12, and 15 through 17 of U.S. Patent Application No. 10/588,532 in view of Leroux, 47 PEST. SCI. 191-97 (1996).

As pointed out in the Office Action, a timely filed terminal disclaimer in compliance with 37 C.F.R. § 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application.

The present application and U.S. Patent Application No. 10/588,532 are commonly owned by Bayer CropScience S.A., 16 Jean-Marie Leclair, F-69009 Lyon, France.

A terminal disclaimer under 37 C.F.R. § 1.321(b) and (c) disclaiming, with the customary exceptions, the terminal part of the statutory term of any patent granted on the instant application that would extend beyond the expiration date(s) of the full statutory term(s) of any patent(s) issued on U.S. Patent Application No. 10/588,532 is filed herewith.

Accordingly, it is requested that the provisional rejection of claims 1, 2, 4 through 9, and 17 through 19 on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1, 2, 4 through 9, 12, and 15 through 17 of U.S. Patent Application No. 10/588,532 in view of Leroux be withdrawn.

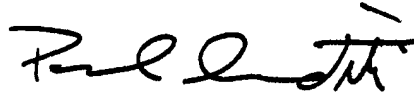
Application No. 10/587,802

AMENDMENT dated June 1, 2009

Response to Office Action of March 17, 2009

In view of the foregoing, it is submitted that this application is in condition for allowance, and an early Office Action to that end is earnestly requested.

Respectfully submitted,



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